

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

| APPLICATION NO.   | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|----------------|----------------------|-------------------------|------------------|--|
| 09/782,077  | 02/14/2001     | Jonathan S. Stamler  | 1661 - CIP              | 9791             |  |
| 7:  | 590 10/31/2002 |                      |                         |                  |  |
| Eric S. Spector JONES, TULLAR & COOPER, PC P.O. Box 2266 Eads Station |                |                      | EXAMINER                |                  |  |
|   |                |                      | PAK, JOHN D             |                  |  |
| Arlington, VA 22202   |                |                      | ART UNIT                | PAPER NUMBER     |  |
|   |                |                      | 1616                    |                  |  |
|   |                |                      | DATE MAILED: 10/31/2002 | . 6              |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

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Application No. **09/782,077** 

Applicant(s)

Stamler

Examiner

John Pak

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|                                    | The MAILING DATE of this communication appears  | on the cover sh                                  | eet with                | the correspondence address  |  |  |  |
|------------------------------------|---|--|-------------------------|---|--|--|--|
| Period f                           | for Reply `   |  |                         |   |  |  |  |
| THE N                              | ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION.   |  |                         |   |  |  |  |
|                                    | ions of time may be available under the provisions of 37 CFR 1.136 (a). If added this communication.  | In no event, howeve                              | ır, may a re            | ply be timely filed after SIX (6) MONTHS from the                             |  |  |  |
| - If NO p<br>- Failure<br>- Any re | period for reply specified above is less than thirty (30) days, a reply within<br>period for reply is specified above, the maximum statutory period will appl<br>to reply within the set or extended period for reply will, by statute, cause<br>ply received by the Office later than three months after the mailing date of<br>patent term adjustment. See 37 CFR 1.704(b). | ly and will expire SIX<br>e the application to b | (6) MONTI<br>secome AB/ | HS from the meiling date of this communication.<br>ANDONED (35 U.S.C. § 133). |  |  |  |
| Status                             |   |  |                         |   |  |  |  |
| 1) 💢                               | Responsive to communication(s) filed on Jul 16, 2002  |  |                         |   |  |  |  |
| 2a) 🗌                              | This action is <b>FINAL</b> . 2b) 💢 This action   | on is FINAL. 2b) X This action is non-final.     |                         |   |  |  |  |
| 3) 🗆                               | Since this application is in condition for allowance e closed in accordance with the practice under Ex par  |  |                         |   |  |  |  |
| Disposi                            | tion of Claims  |  |                         |   |  |  |  |
| 4) 💢                               | Claim(s) <u>1-9</u>   |  |                         | is/are pending in the application.  |  |  |  |
| 4                                  | la) Of the above, claim(s)  |  |                         | is/are withdrawn from consideratio  |  |  |  |
| 5) 🗆                               | Claim(s)  |  |                         | is/are allowed.   |  |  |  |
|                                    | Claim(s) 1-9  |  |                         |   |  |  |  |
|                                    | Claim(s)  |  |                         |   |  |  |  |
|                                    | Claims  |  |                         |   |  |  |  |
|                                    | tion Papers   |  | •                       | •   |  |  |  |
| ·· —                               | The specification is objected to by the Examiner.   |  |                         |   |  |  |  |
| 10)□                               | The drawing(s) filed on is/ar-  | e all accept                                     | ted or b                | D objected to by the Examiner.  |  |  |  |
| •                                  | Applicant may not request that any objection to the de  |  |                         |   |  |  |  |
| 11)                                | The proposed drawing correction filed on  | -  |                         |   |  |  |  |
|                                    | If approved, corrected drawings are required in reply t   |  |                         |   |  |  |  |
| 12)                                | The oath or declaration is objected to by the Exami   | iner.  |                         |   |  |  |  |
| Priority                           | under 35 U.S.C. §§ 119 and 120  |  |                         |   |  |  |  |
| 13)□                               | Acknowledgement is made of a claim for foreign pr   | riority under 35                                 | 5 U.S.C.                | § 119(a)-(d) or (f).  |  |  |  |
| a) 🗆                               | ☐ All b)☐ Some* c)☐ None of:  |  |                         | •   |  |  |  |
|                                    | 1. Certified copies of the priority documents hav   | e been receive                                   | d.                      |   |  |  |  |
|                                    | 2. $\square$ Certified copies of the priority documents hav   | e been receive                                   | d in App                | olication No  |  |  |  |
|                                    | 3. Copies of the certified copies of the priority do application from the International Burea   |  |                         |   |  |  |  |
| *S                                 | ee the attached detailed Office action for a list of the  | e certified copi                                 | es not r                | eceived.  |  |  |  |
| 14)                                | Acknowledgement is made of a claim for domestic   | priority under                                   | 35 U.S.                 | C. § 119(e).  |  |  |  |
| a) L                               |   |  |                         |   |  |  |  |
| 15) X                              | Acknowledgement is made of a claim for domestic   | priority under                                   | 35 U.S.                 | C. §§ 120 and/or 121.   |  |  |  |
| Attachm                            | ent(s)<br>otice of References Cited (PTO-892)   | 4) 🗀 Interview S.                                | ımmanı IDT              | O-413) Paper No(s).   |  |  |  |
| $\tilde{}$                         | otice of Draftsperson's Patent Drawing Review (PTO-948)   |  |                         | nt Application (PTO-152)  |  |  |  |
| _                                  | ) Information Disclosure Statement(s) (PTO-1449) Paper No(s)  |  |                         |   |  |  |  |
|                                    | · · · · · · · · · · · · · · · · · · ·   |  |                         |   |  |  |  |

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Claims 1-9 are pending in this application.

Applicant's election with traverse of NOCl as the single disclosed species in Paper No. 5 (7/16/02) is acknowledged. The traversal is on the ground(s) that the Office action is treating the requirement as a restriction requirement rather than an election of species requirement. This is not found persuasive because the requirement is indeed an election of species.

The requirement is still deemed proper and is therefore made FINAL.

Applicant is advised of the following: claimed subject matter directed to the species NOCl and  $N_2O_3$  could be deemed allowable **except** for the double patenting rejection set forth below.

Claims 1-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,314,956. Although the conflicting claims are not identical, they are not patentably distinct. The patented claims do not explicitly recite NOC1 or N<sub>2</sub>O<sub>3</sub>, but such compounds are suggested from the language, "compound having an NO group." Both NOCl and N<sub>2</sub>O<sub>3</sub> are well known to have an NO group, and one having ordinary skill in the art would have been motivated to utilize such readily available NO group containing compounds to treat pulmonary disorders, as claimed. Therefore, the ordinary skilled artisan in this field would have recognized the subject matter of claims 1-5 as an obvious variation of the subject matter of the patented claims.

The examination of this application will now continue with the next species,  $H_2S$ .

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Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-3, 6-9 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for other gaseous active agents, does not reasonably provide enablement for  $H_2S$ . The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims with respect to  $H_2S$ .

The state of the art regarding H<sub>2</sub>S is such that one skilled in the art would not readily accept effective treatment of pulmonary disorders of the type claimed herein. The pulmonary disorders encompassed by the claims include asthma (specification p. 3, first paragraph).

Embase abstract 2000083448 discloses that some asthmatics may demonstrate signs of bronchial constriction as a result of exposure to 2 ppm H<sub>2</sub>S for 30 minutes. Chemical abstracts 115:56107 discloses that asthmatic persons exposed to low concentrations of H<sub>2</sub>S demonstrated increased airway resistance and decreased specific airway conductance. One asthmatic patient experienced bronchial obstruction. Medline abstract 92296647 discloses that H<sub>2</sub>S exposures at concentrations below the current occupational limits cause physiological changes in pulmonary function, thus suggesting that asthmatics are at risk. Applicant's Example X is noted in this regard, but (i) it is not clear how much/what effect the H<sub>2</sub>S is having there due to the several other combined treatments that are applied, and (ii) it is not clear from Example X whether H<sub>2</sub>S

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itself has treatment efficacy, against the countervailing expectation of the state of the art as set forth above. Insufficient information has been provided as to the specifics of the protocol and the isolation of the effect of H<sub>2</sub>S, in light of the state of the art evidence to the contrary.

For these reasons, all claims must be rejected.

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier numbers for accessing the facsimile machines are (703) 308-4556 or (703) 305-3592.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Pak whose telephone number is (703) 308-4538. The Examiner can normally be reached on Monday through Friday from 7:30 AM to 4 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. José Dees, can be reached on (703) 308-4628.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1235.

JOHN PAK PRIMARY EXAMINER GROUP 1822